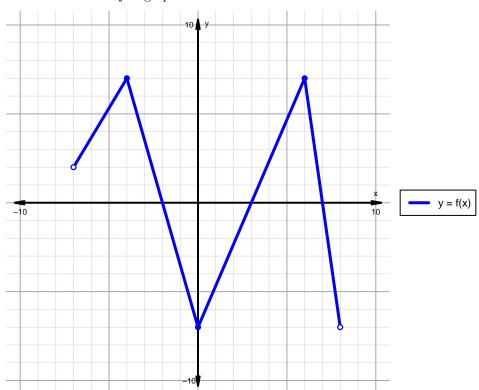
Intervals, Transformations, and Slope Practice (version 53)

1. The function f is graphed below.

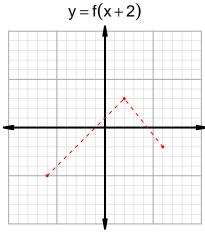


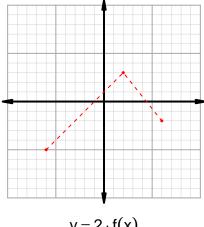
Indicate the following intervals using interval notation. Remember, you can use \cup between two intervals to indicate the union. Except for range, all intervals will indicate x values; this is standard.

| Feature | Where |
|------------|-------|
| Positive | |
| Negative | |
| Increasing | |
| Decreasing | |
| Domain | |
| Range | |

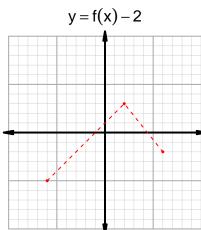
Intervals, Transformations, and Slope Practice (version 53)

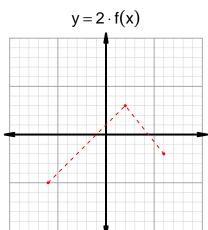
2. In the four graphs below, y = f(x) is graphed as a dotted line. With a solid line, please graph the transformations indicated by the equations below.





 $y = f(2 \cdot x)$





3. Let function g be defined by the table below. Use the formula $\frac{g(x_2)-g(x_1)}{x_2-x_1}$ to find the average rate of change between $x_1=61$ and $x_2=93$. Express your answer as a reduced fraction.

| x | g(x) |
|----|------|
| 45 | 61 |
| 57 | 93 |
| 61 | 57 |
| 93 | 45 |
| | |